DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-004436
Date Inspected: 21-Oct-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 630
OSM Departure Time: 1530
Location: Shanghai, China

CWI Name:	Wu Ming Kai			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG & Tower

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Sub-Assembly Bay 2:

The QA Inspector randomly observed that no contract work was being performed in Bay 2.

OBG Sub-Assembly Bay 3:

The QA Inspector randomly observed ZPMC welder Sun Zou Wen ID 046920, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112-FCM, to tack weld 22 millimeter (mm) thick I-Ribs to Side Plate SP461-001 Weld Joint (WJ) Numbers 007/008. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Jiang Jing Teng ID 046830 (WJ's, utilizing the Submerged Arc Welding (SAW) Process in the 1G (Flat Groove) Position with ZPMC WPS WPS-B-T-2221-B-L2c-S-2, to weld Side Plate SP537A/Plate 1036B to SP537A/PL1036B at WJ 099. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 571 amps, 29.3 volts with a travel speed of 450 mm per minute. The weld parameters appeared to comply with contract requirements.

OBG Sub-Assembly Bay 4:

The QA Inspector randomly observed ZPMC welder Lv Peng 048617, utilizing the SMAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-P-2213-B-U3b, to tack weld 77M (S) Tower Diaphragm SSD1-SA104 Flange Plate Assembly sections at WJ SSD1-SA104-10A/B. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Yu Dong Ping, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Han Guo Dong ID 062259, utilizing the Flux Cored Arc Welding (FCAW) Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-P-2233-B-U3-F, to tack weld 53m (E) Tower Diaphragm Flange Plate Assembly sections p1082/SA222 at WJ ESD1-SA404-9A. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Yu Dong Ping, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 214 amps, 25.3 volts with a travel speed of 112 mm per minute. The weld parameters appeared to comply with contract requirements.

OBG Sub-Assembly Bay 7:

The QA Inspector randomly observed ZPMC welder Zhang Qing Quan ID 044774, utilizing the FCAW Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2232-TC-U4b-F, to weld the 30 mm thick web plate in the slot in Flange X7J-2 on Floor Beam Wing Diaphragm FB016-026 at WJ 043. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Hu Wei Qing, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 306 amps, 30.3 volts with a travel speed of 303 mm per minute. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Wang Qing Bo ID 068501, utilizing the FCAW Process with a tracker in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-T-2132-3, to weld 20 mm thick I-Stiffeners to Floor Beam Wing Diaphragm FB012-018 at WJ 013. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Huang Wen Pang, monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

OBG Sub-Assembly Bay 8:

The QA Inspector randomly observed ZPMC welder Li Fu Li ID 045136, utilizing the SMAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-T-2112-FCM, to tack weld various I-Stiffeners to Floor Beam Sub-Assembly FB038-001. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Hu Wei Qing, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Liu Yun Jun ID 202654, utilizing the FCAW Process in the 3G (Vertical Groove) Position with ZPMC WPS WPS-B-P-2233-B-U3-F, to tack weld 65M (S) Tower Lower Diaphragm Flange Plate Assembly sections p976/p1290 at WJ SSD1-SA325-2A. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Yu Dong Ping, monitoring weld parameters. The QA

WELDING INSPECTION REPORT

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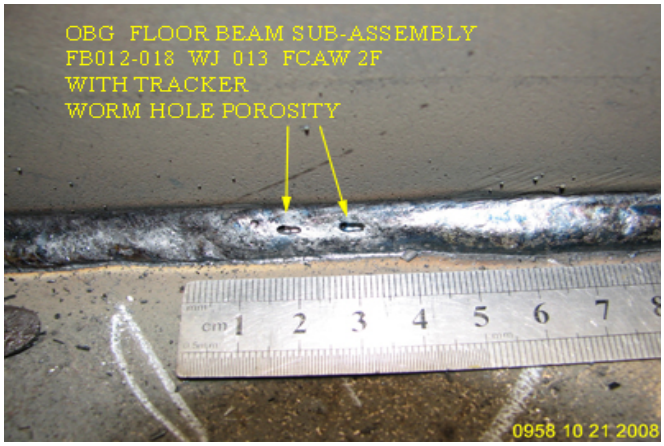
Inspector also randomly monitored weld parameters and recorded them as follows: 201 amps, 25.7 volts with a travel speed of 114 mm per minute. The weld parameters appeared to comply with contract requirements.



Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi 13764716411, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer